Dec. 27, 1949 B. W. HENDRICKSON 2,492,636

HAIR CURLER

Filed Feb. 14, 1947

Fig. 1.

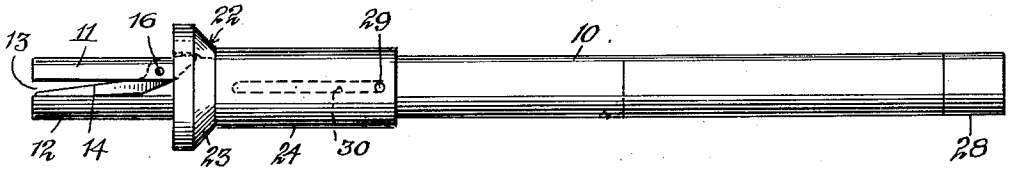


Fig. 2.

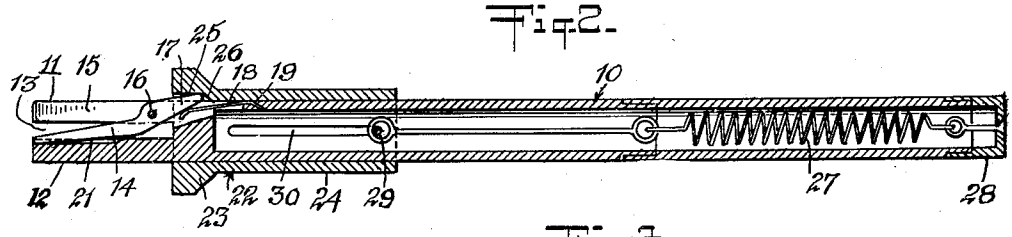


Fig. 3.

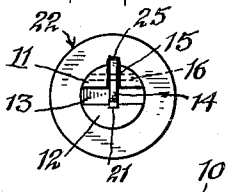


Fig. 4.

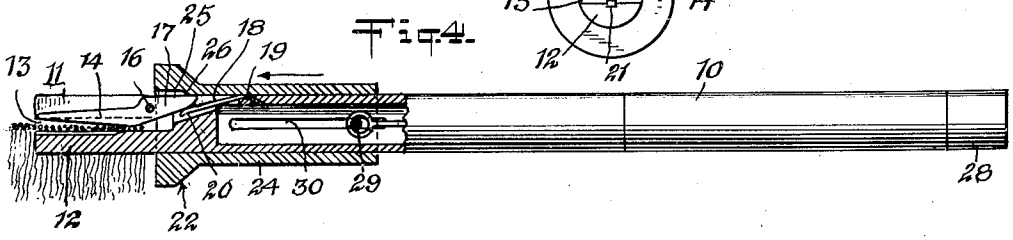


Fig. 5.

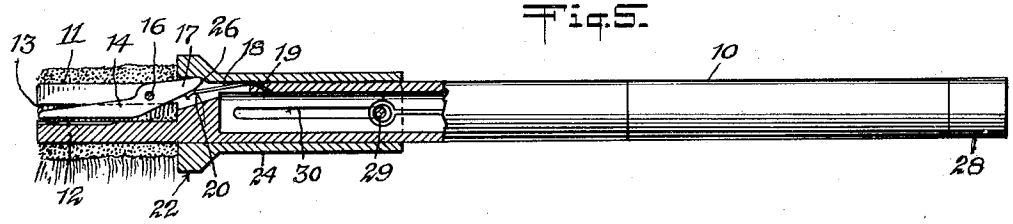
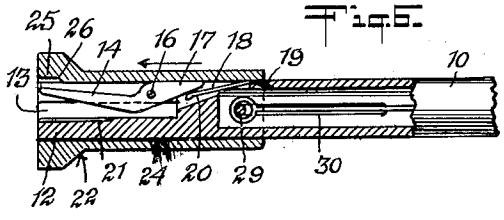


Fig. 6.



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HAIR CURLER

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5 Claims. (Cl. 132—37)

1

This invention relates to a hair curling device of the type which is adapted to form a curl against the head and hold the formed curl so that it may be pinned and then be separated from the device.

The principal object of the invention is the provision of improvements in a device of the indicated character, whereby the hair may be clamped to enable the operator to form a curl and to subsequently unclamp the hair and separate or remove the formed curl from the device in one and the same convenient operation.

With the foregoing, other objects and advantages of the invention will appear when the following specification is read in conjunction with the accompanying drawing, in which—

Fig. 1 is a side view of a hair curler embodying the present invention.

Fig. 2 is a central longitudinal sectional view of the curler.

Fig. 3 is an end view.

Fig. 4 is a side view of the curler partly in section and showing a disposition of the parts for receiving the end portions of a strand of the hair.

Fig. 5 is a view similar to Fig. 4, but showing the hair clamped and wound into a curl.

Fig. 6 is a view similar to Fig. 4 with a portion broken away, showing a disposition of the parts for removing the formed curl to separate the curler therefrom.

Referring now more particularly to the drawing, it will be apparent the device includes a rod or cylindrical element 10 made in sections, and which is hollow for a portion of its length and has cooperative spaced jaws 11 and 12 on one end by reason of a lengthwise kerf which provides a mouth 13 to receive the end portions of a strand of the hair crosswise of the jaws. These jaws 11 and 12 provide means on which the hair may be wound to form a curl.

In order to clamp the end portions of the hair strand, there is provided clamping means which cooperates with the jaw 12. The clamping means consists of a clamping member 14 which is arranged in a lengthwise slot 15 in the jaw 11. A pivot pin 16 extends transversely through the jaw 11 and the clamping member 14 near its inner end. The member 14 is of angular formation, which provides an inner end portion 17 slanting laterally outward beyond the jaw 11, as shown. A leaf spring 18 has one end 19 tightly secured in an oblique notch in the rod, and its other end 20 bears on the end portion 17 to constantly urge the clamping member 14 toward its clamping position with respect to the jaw 12. The rod is recessed to receive the spring 18 and to accommodate the end portion 17. The jaw 12 has a longitudinal groove 21 to cause a slight crimping of the hair under the action of the clamping member 14 to thereby more effectually prevent the hair from slipping. The clamping member 14 is movable into an unclamping position disposed in the slot 15 outwardly of the mouth 13.

2

In accordance with the invention, there is provided a slidable part 22 on the rod 10. This part 22 constitutes a circular abutment which limits axial movement of the hair along the jaws in forming a curl. The part 22 is conical for a portion of its length, as at 23, and the remaining portion 24 is tubular in continuation of the portion 23, to loosely fit on the rod for sliding movement along the rod and the jaws. The portion 23 has a longitudinal notch or groove 25 therein to receive the end portion 17. The groove 25 also provides cam means 26 which coacts with the end portion 17 for the purpose of moving the clamping member 14 into a releasing or unclamping position and to enable the spring 18 to move the clamping member 14 into its clamping position in response to the sliding movement of the part 22 outwardly to an advanced position and inwardly to a retracted position.

In order to return the part 22 to its retracted position there is provided resilient means, such as the helical spring 27 disposed in the hollow portion of the rod. The spring 27 has one end thereof connected with the end section 28 of the rod and the other end of the spring is connected by a link with a cross pin 29 carried by the tubular portion 24 and extending transversely through longitudinal slots 30 in the rod. The end walls of the slots 30 encountered by the pin 29 limit the movement of the part 22 in opposite directions to the advanced and retracted positions. The pin 29 disposed in the manner described prevents the part 22 from turning on the rod and assures cooperation of the cam means 26 and the clamping member 14.

From the foregoing, it will be understood that as the part 22 is being advanced, the cam means 26 encounters the end portion 17 causing the clamping member 14 to pivot into its releasing position clear of the mouth 13. This requires only a fraction of the total outward movement of the part 22. The end portions of a strand of the hair then may be conveniently placed in the mouth 13 after which the part 22 is released to the action of the spring 27 which retracts it. This enables the spring 18 to force the clamping member 14 into engagement with

the hair to clamp it tightly against the jaw 12. The device is then rotated causing the hair to be wound on the cylindrical surfaces of the jaws and against the abutment 23, forming a curl. A suitable pin is applied to the curl, after which the part 22 is fully advanced, causing the clamping member 14 to release the curl and at the same time removing the formed curl from the jaws, whereby the device is separated from the hair.

I claim:

1. A hair curler comprising a cylindrical element, one end of said element bifurcated providing spaced jaws around which the hair may be wound to form a curl, one of said jaws having a slot therein, a hair clamping member pivotally connected with said element and movable in the slot with respect to the second jaw to clamp and release the hair, spring means which urges the clamping member into its clamping position, and an abutment surrounding said element and slidable thereon and having means to actuate the clamping member to release the hair after the curl is formed and the abutment then removing the formed curl.

2. A hair curler comprising curl forming members, hair clamping means carried by one of said members and cooperable with the other member to clamp and release the hair, an abutment movable along the forming members, means limiting the movement of the abutment along the forming members in opposite directions and preventing turning movement with respect thereto, and means on the abutment which operates the clamping means releasing the hair after the curl is formed and the abutment then removing the formed curl as the abutment is moved along the forming members.

3. A hair curler comprising a rod having cooperative spaced jaws on one end providing means on which hair may be wound to form a curl, one of said jaws having a slot therein, a hair clamping member connected with the jaw having the slot for movement in the slot into a clamping position with respect to the other one of said jaws, and movable into an unclamping position in the slot, resilient means to move the clamping member into its clamping position to clamp the hair so that the hair may be wound to form the curl, an abutment movable along the rod, said rod having longitudinal slots therein, a pin carried by the abutment extending through the longitudinal slots thereby limting the movement of the abutment along the rod in opposite directions and also preventing turning of the abutment, protracted movement of the abutment causing the clamping member to unclamp the hair after the curl is formed and then remove the formed curl from the jaws, and resilient means connected with the pin and the rod causing return movement of the abutment into a retracted position and yieldingly retaining the abutment therein.

4. A hair curler comprising a rod having cooperative spaced jaws on one end providing means on which hair may be wound to form a curl, a hair clamping member carried by one of said jaws and cooperable with the other jaw to clamp and release the hair, resilient means carried by the rod causing the clamping member to clamp the hair, an abutment movable along the rod and having cam means to actuate the clamping member into its clamping position, said rod having longitudinal slots therein, a pin carried by the abutment extending through said slots thereby limiting the movement of the abutment along the rod in opposite directions and also preventing turning of the abutment, protracted movement of the abutment causing the clamping member to unclamp the hair after the curl is formed and then remove the formed curl from the jaws, and resilient means connected with the pin and the rod causing return movement of the abutment into a retracted position and yieldingly retaining the abutment therein.

5. A hair curler comprising a rod having cooperative spaced jaws on one end providing means on which hair may be wound to form a curl, one of said jaws having a slot therein, a hair clamping member connected with the jaw having the slot for movement out of the slot into a clamping position with respect to the other one of said jaws, and movable into an unclamping position into the slot, resilient means to move the clamping member into its clamping position to clamp the hair so that the hair may be wound to form the curl, an abutment member slidable along the rod and jaws and having means to move the clamping member to its unclamping position to release the formed curl and the abutment member then pushing the curl from said jaws, and resilient means connected with the rod and the abutment member to yieldingly retain the abutment member retracted.

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